

**In the Claims:**

For the convenience of the Examiner, all pending claims are herewith presented:

Claims 1 through 20 are hereby cancelled without prejudice or disclaimer.

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21. **(NEW)** A system for receiving a signal comprising:  
a receiver receiving the signal;  
an interference avoidance system coupled to the receiver, the interference avoidance system turning the receiver off and on at a controllable frequency; and  
wherein the interference avoidance system applies a first duty cycle if interference is present and a second duty cycle if interference is not present.

22. **(NEW)** The system of claim 21 wherein the receiver further comprises a plurality of stages.

23. **(NEW)** The system of claim 21 wherein the receiver further comprises:

a plurality of stages; and  
a duty cycle system coupled to two or more of the plurality of stages, the duty cycle system turning each of the two or more of the plurality of stages off and on at a separately-controllable frequency.

24. **(NEW)** The system of claim 21 wherein the receiver further comprises:

a mixer stage changing the frequency of the signal;

a band pass stage coupled to the mixer stage, the band pass stage filtering the signal;

an automatic gain control stage coupled to the band pass stage, the automatic gain control stage controlling the gain of amplification of the signal; and

a duty cycle system coupled to the mixer stage and the automatic gain control stage, the duty cycle system turning the mixer stage on and off and a first frequency, and turning the automatic gain control stage on and off at a second frequency.

25. **(NEW)** The system of claim 21 wherein the receiver further comprises a mixer stage changing the frequency of the signal, and a duty cycle system coupled to the mixer stage turning the mixer stage on and off.

26. **(NEW)** The system of claim 21 wherein the receiver further comprises an automatic gain control stage controlling a gain of amplification of the signal, and a duty cycle system coupled to the automatic gain control stage and turning the automatic gain control stage on and off.

27. **(NEW)** The system of claim 21 further comprising a signal strength system.

28. **(NEW)** The system of claim 21 wherein the interference avoidance system determines whether the magnitude of the signal output changes for a corresponding change in a duty cycle.

29. **(NEW)** The system of claim 21 wherein the interference avoidance system receives duty cycle data from a duty cycle system and selects a duty cycle based upon the duty cycle data.

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30. (NEW) The system of claim 21 wherein the receiver further comprises:

a mixer stage changing the frequency of the signal; and  
a band pass stage filtering the signal.

31. (NEW) A system for avoiding interference comprising:

a signal input receiving a signal and determining whether interference is present; and

a receiver cycling output outputting control data for turning a receiver on and off based on whether interference is present.

32. (NEW) The system of claim 31 wherein the signal has been processed by a receiver.

33. (NEW) The system of claim 31 wherein the signal is a spread spectrum signal.

34. (NEW) The system of claim 31 wherein the receiver cycling output generates duty cycle control data.

35. (NEW) A method for processing a signal comprising:  
receiving interference status data;

cycling a receiver component according to a first duty cycle if the interference status data indicates that the signal includes a noise signal; and

cycling the receiver component according to a second duty cycle if the interference status data indicates that the signal includes the noise signal.

36. (NEW) The method of claim 35 wherein the receiver component is a mixer.